Amendments to the Claims

1. (Currently amended) A method of classifying an activity state of a driver, the method comprising:

providing ~~an at least two state activity classifier~~ a statistical classifier, the statistical classifier being at least one of a C4.5, a RIPPER, and a Quadratic classifier, and configuring the statistical classifier as an at least two-state activity classifier operable to recognize at least a first driving state corresponding to a maneuver activity and a second driving state corresponding to a non-maneuver activity;

receiving sensor data relating to at least one vehicle operating condition;

classifying the driver activity ~~using one of a linear function of the sensor data, a non-linear function of the sensor data, and a statistical classifier~~ using the configured statistical classifier into one of ~~the~~ at least [[two]] first and second driving states based upon the sensor data[[,]] ~~a first of the at least two states corresponding to a maneuver activity and a second of the at least two states corresponding to a non-maneuver activity~~; and

utilizing the classified state of the at least [[two]] first and second driving states to determine whether to send an event to the driver of the vehicle.

2. (Currently amended) The method of claim 1 wherein [[the]] classifying the driver activity into the first driving state ~~of the at least two states~~ corresponding to the maneuver activity further comprises:

classifying the state of the driver activity as a maneuver when engaged in an activity corresponding to one of a change in the position of a vehicle with respect to one or more vehicles or stationary objects, a parking maneuver, a freeway ingress, a freeway egress, a communication with an external party, an interaction with another occupant and a state of an entertainment device.

3. (Currently amended) The method of claim 1 wherein [[the]] classifying the driver activity into the second driving state ~~of the at least two states~~ corresponding to the non-maneuver activity further comprises:

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classifying the state of the driver activity as a non-maneuver when disengaged from an activity corresponding to one of a change in the position of a vehicle with respect to a one or more vehicles or stationary objects, a parking maneuver, a freeway ingress, a freeway egress, a communication with an external party, an interaction with another occupant, and a state of an entertainment device.

4. (Original) The method of claim 1 further comprising:
receiving a second sensor data relating to at least one of a condition of the driver, a condition of a passenger compartment, and a condition of a passenger.

5. (Original) The method of claim 1 wherein classifying the driver activity further comprises analyzing a position and a rate of change of the position of one of an accelerator, a brake, a steering device, a turn signal selector, a clutch and a gear selector.

6. (Currently amended) The method of claim 1 wherein [[the]] classifying the driver activity state further comprises classifying the driver activity state using one of instantaneous sensor data and prior sensor data.

7-9. (Cancelled)

10. (Currently amended) The method of claim 1 further comprising:
altering presentation of [[an]] the event in the vehicle when the classified state is the first driving state corresponding to the maneuver activity classifying the activity state of the driver is maneuver.

11. (Previously presented) The method of claim 1 wherein the event is one of a wireless communication, a vehicle condition alert, a navigation instruction, an email message, and an entertainment presentation.

12. (Currently amended) A two-state classification apparatus for classifying an activity state of a driver, the classification apparatus comprising:

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an input for receiving sensor data relating to at least one vehicle condition; and

a processor coupled to the input, wherein the processor analyzes the sensor data to determine a classification of the activity state of the driver using a statistical classifier [[into]], wherein the statistical classifier used by the processor is at least one of a C4.5, a RIPPER, and a Quadratic classifier that is configured as an at least two-state activity classifier operable to recognize at least a first driving state corresponding to a maneuver activity and a second driving state corresponding to a non-maneuver activity, and wherein the processor determines the classification of the activity state of the driver using the statistical classifier as one of a maneuver and non-maneuver and utilizes the classification of the activity state to determine whether to send an event to the driver of the vehicle.

13.   (Original) The classification apparatus of claim 12 further comprising an output for conveying a signal relating to the classification of the activity state of the driver.

14-15. (Cancelled)

16.   (Currently amended) The classification apparatus of claim 12 wherein the classification of non-maneuver enables [[an]] the event in the vehicle.

17.   (Currently amended) The classification apparatus of claim 12 wherein the classification of maneuver delays [[an]] the event in the vehicle.

18.   (Original) The classification apparatus of claim 17 wherein the event is a notification of a change in state of an other apparatus in the vehicle.

19.   (Original) The classification apparatus of claim 12 wherein the sensor data corresponds to one of an instrumentation data, a vehicle control data, a driver condition data, and a driver activity data.

20.   (Original) The classification apparatus of claim 12 wherein the processor analyzes the sensor data corresponding to a driver identification.

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21.   (Original) The classification apparatus of claim 12 wherein the at least one vehicle condition is one of a vehicle mechanical condition, a vehicle passenger compartment condition, a driver state and a passenger state.

22.   (Original) The classification apparatus of claim 12 wherein the at least one vehicle condition is one of an accelerator pedal position, a brake pedal position, a vehicle speed, a turn signal state, and a steering wheel position.

23.   (Original) The classification apparatus of claim 12 wherein the classification corresponds to a current condition of the sensor data.

24.   (Original) The classification apparatus of claim 12 wherein the classification corresponds to a past condition of the sensor data.

25.   (Currently amended) A vehicle arranged and constructed to use a classification of an activity state of a driver comprising:

a classification apparatus using a statistical classifier for providing a signal corresponding to one of a maneuver and non-maneuver, wherein the statistical classifier used by the apparatus is at least one of a C4.5, a RIPPER, and a Quadratic classifier that is configured as an at least two-state activity classifier operable to recognize at least a first driving state corresponding to a maneuver activity and a second driving state corresponding to a non-maneuver activity, the signal being based on [[a]] sensor data related to at least one operational condition; and

a device operable to use the signal for determining a timing for sending the driver an event.

26.   (Original) The vehicle of claim 25 wherein when the signal corresponds to non-maneuver and the timing is immediate for notifying the driver of the event.

27.   (Original) The vehicle of claim 25 wherein when the signal corresponds to maneuver and the timing is delayed for notifying the driver of the event.

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28. (Original) The vehicle of claim 25 wherein the device is a wireless communication device.

29. (Original) The vehicle of claim 25 wherein the operational condition is one of a instrumentation condition, a vehicle control condition, an entertainment device condition, a driver condition, and a driver activity condition.

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